Parliamentary Standing Committee on Public Works

REPORT

relating to

ADELAIDE AIRPORT: UPGRADING FOR INTERNATIONAL SERVICES

(Fifth Report of 1982)

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA 1982

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ADELAIDE AIRPORT: UPGRADING FOR INTERNATIONAL SERVICES

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MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS
(Twenty-sixth Committee)

Melville Harold Bungey, Esq., M.P. (Chairman)
James Leslie McMahon, Esq., M.P. (Vice-Chairman) [5]

Senate	House of Representatives
Senator Dominic John Foreman [3]	David Bruce Cowan, Esq., M.P.
Senator Bernard Francis Kilgariff	Benjamin Charles Humphreys, Esq., M.P.
Senator John Raymond Martyr [4]	Urquhart Edward Innes, Esq., M.P.
Senator Jean Isabel Melzer [1]	Murray Evan Sainsbury, Esq., M.P.
Senator Harold William Young [2]	

1 Retired 30 June 1981

2 Ceased to be member on election as President of the Senate on 18 August 1981

3 Appointed 25 August 1981

4 Appointed 25 August 1981

5 Appointed Vice-Chairman 27 August 1981

EXTRACT FROM
THE VOTES AND PROCEEDINGS OF THE HOUSE OF REPRESENTATIVES,
NO. 70 DATED 17 FEBRUARY 1982

8 PUBLIC WORKS COMMITTEE - REFERENCE OF WORK - ADELAIDE AIRPORT - UPGRADING FOR INTERNATIONAL SERVICES: Mr. Hunt (Minister for Transport), for Mr. McVeigh (Minister for Housing and Construction), pursuant to notice, moved - That, in accordance with the provisions of the Public Works Committee Act 1969, the following proposed work be referred to the Parliamentary Standing Committee on Public Works for consideration and report: Adelaide Airport: Upgrading for international services.

Mr. Hunt presented plans in connection with the proposed work.

Debate ensued.

The debate having been closed by the reply of Mr. Hunt -
Mr. Wallis, by leave, addressed the House.

Question - put and passed.

WITNESSES

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Wright, J.D., Esq., M.P., Deputy Leader of the Opposition and Member for Adelaide, Shop 9, Richmond Village, 200 West Beach Road, Richmond, South Australia

C O N T E N T S

ILLUSTRATIONS

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

ADELAIDE AIRPORT: UPGRADING FOR INTERNATIONAL SERVICES

REPORT

By resolution on 17 February 1982 the House of Representatives referred the proposal to upgrade Adelaide Airport for International Services to the Parliamentary Standing Committee on Public Works for investigation and report to Parliament.

The Committee has the honour to report as follows:

THE REFERENCE

1. The proposal referred to the Committee consists of the following elements:

- a single storey terminal building including facilities for arriving and departing passengers;
- an apron to accommodate two Boeing 747 (B747) aircraft adjacent to the new terminal;
- a taxiway to connect the new apron to the existing taxiway system;
- widening of some taxiway fillets to allow regular use by B747 or other wide-body international jet aircraft;
- engineering services, access roads, car parking areas; and
- improvements to the airport electrical reticulation system.

2. The estimated cost of the proposed work is $10.9 million at January 1982 prices.

THE COMMITTEE'S INVESTIGATION

3. The Committee received written submissions from the Department of Transport (DOT) and the Department of Housing and Construction and took evidence from their representatives at a public hearing in Adelaide on 31 March and 1 and 2 April 1982.

4. The Committee also received written submissions and took evidence from Mr John Scott, M.P., Federal Member for Hindmarsh; Mr Jack Wright, M.P., Deputy Leader of the Opposition and Member for Adelaide, South Australian Parliament; Mr Heini Becker, M.P., Member for Hanson, South Australian Parliament; Mr John Oswald, M.P., Member for Morphett, South Australian Parliament.

5. Mr Ralph Jacobi, M.P., Federal Member for Hawker, presented a written submission.

6. The following organisations and individuals presented written submissions and their representatives also gave evidence: The South Australian Government, the Corporation of the City of Adelaide, the Council of the City of West Torrens, the Thebarton Residents Association, the Anti Airport Noise Association and Help for Airport Victims Committee, the Australian International Pilots Association, the Metropolitan Regional Organisation Western, Trans Australia Airlines, Qantas Airways Limited, Ansett Handling Services, the Chamber of Commerce and Industry, S.A. Inc, the South Australian Chapter of the Australian Federation of Travel Agents Ltd, the Motor Inn and Motel Association of Australia (S.A. Branch), the Australian Hotels Association (S.A. Branch) and Mr Stephen Blight.

7. The Committee also received a number of letters and written submissions from private individuals and organisations concerning the proposal.

8. Prior to the public hearing the Committee inspected the proposed site for the International Terminal Building (ITB) and apron.

9. The Committee's proceedings will be printed as Minutes of Evidence.

BACKGROUND

10. This is the second reference relating to works proposed at Adelaide on which the Committee has reported in 1982. In March 1982 the Committee's final report relating to the Upgrading of Airport Facilities for the Introduction of Domestic Wide-Body Aircraft was tabled (Second Report of 1982). That report related to works proposed at Hobart and Adelaide Airports for

the introduction of domestic wide-bdoy aircraft and the consequent redeployment of the existing domestic fleet. In recommending that the Adelaide component of the proposal should proceed, the Committee recommended that the House of Representatives refer to the House of Representatives Standing Committee on Environment and Conservation the matter of aircraft noise. The Committee understands that the Minister for Transport and the Minister for Home Affairs and Environment have the recommendation under active consideration. The Committee also understands that the Minister will also be responding to other conclusions and recommendations relating to the more vigorous application of noise abatement procedures and the operation of light executive jet aircraft and the ground running of turbo-propeller aircraft within curfew hours.

THE NEED

11. At present Adelaide does not have direct access to scheduled regular international flights and is the only capital city without this facility. Use of Adelaide Airport by international flights has been confined to infrequent charter flights by B707 and DC8 aircraft and by aircraft using Adelaide as a weather alternate.

12. Adelaide has the second highest percentage of European born population of all capital cities and in 1979/80 received 13.2 per cent of all international air travellers to Australia. In the year ended March 1981 an average of 2000 international passengers per week travelled in each direction to and from South Australia. This number comprised 1500 South Australian resident travellers and 700 overseas visitors who indicated South Australia as their State of main destination on their Immigration Arrival Card.

13. South Australians wishing to travel overseas in these circumstances are required to make their way to existing gateway ports at Sydney, Melbourne or Perth. This arrangement imposes add-on costs to the price of overseas travel. These costs consist of the cost of domestic airfares or land transport costs to and from the gateway port and because many domestic flights to gateway ports do not readily link up with international flights, it necessitates additional time waiting for connections which may require overnight accommodation at the gateway port. In evidence

it was stated that 80 per cent of South Australian travellers leave the country through Tullamarine, travel on 15 different international carriers and on 80 flights per week.

14. In 1979 the Joint Government Advisory Committee on Adelaide's Airport requirements found that regular international services would not become viable until the 1990s. The Committee's report did recommend, however, that planning options for both the existing and future major airport sites incorporate international airline facilities.

15. The report of the House of Representatives Select Committee on Tourism of 1978 (Parliamentary Paper 281/1978), although recommending international services for Townsville made no recommendations for similar facilities to be provided at Adelaide Airport.

16. The Department of Transport, in evidence, indicated that the provision of international facilities at Adelaide Airport, was not high on the departmental list of airport priorities. The decision by the Government to provide international facilities at Adelaide Airport reinforces the views taken by this Committee in earlier reports (Redevelopment of Brisbane International Airport - Further Dredging and Reclamation - Ninth Report of 1981; and Upgrading of Airport Facilities for the Introduction of Domestic Wide-Body Aircraft - Second Report of 1982) that a set of national priorities for airport development should be determined in place of the current ad hoc approach to airport development.

17. A recent reassessment of the economic viability of the Adelaide population base to support sustained regular international flights has been carried out. The reassessment, carried out by the Department of Transport (DOT), is based on an analysis of Bureau of Statistics data for 1979 and estimates the additional demand that would be generated as a result of the provision of direct access to international flights. The international carriers provided evidence supporting this assessment. The DOT study indicates that for 1979 the estimated traffic generation was 133 470 passengers whose origins and destinations are set out in Table 1 below:

TABLE 1 - Potential International Passengers Available for Carriage on International Services, Adelaide, 1979

Origin destination	Passenger movements per annum	Per cent
Asia	44 680	33
United Kingdom	39 740	30
New Zealand	49 050	37
TOTAL	133 470	100

18. Some submissions to the Committee stressed the benefits to be gained from direct international airline freight services. The Committee does not accept this view as being a substantial factor in support of the proposal to provide international facilities at Adelaide.

19. Evidence indicated that attempts to encourage arrangements between international carriers and domestic airlines to overcome the penalties now being experienced by international travellers to and from South Australia had been unsuccessful, and no meaningful developments could be anticipated in this area.

20. Committee's Conclusions International air travellers, to and from Adelaide, are penalised by the existing airline arrangements, particularly the lack of an international gateway at Adelaide.

21. The Committee accepts that there is marginal justification for providing international airline terminal facilities in Adelaide, provided the Government is convinced that the penalties now being experienced cannot be removed in any other way.

THE PROPOSAL

22. The proposal is to construct a separate international terminal building at Adelaide airport capable of handling a full load of passengers from one B747 aircraft and to construct an apron capable of accommodating two B747 aircraft.

23. This will necessitate the construction of a new building, an aircraft apron, extending an existing taxiway and providing some fillet widening.

24. To enable these facilities to be provided at the site proposed it would also be necessary to realign the access road leading to the domestic terminal, to provide a carpark for 250 vehicles and to provide electrical power, water and sewerage services.

25. The breakup of the estimated cost of the proposal, at January 1982 prices, is $10.9 million made up as follows:

	$m
Terminal building	4.1
Apron and other aircraft pavements	3.0
Access roads, carpark, engineering services	3.8
TOTAL	10.9

26. Construction details are at Appendix A of this report.

27. Terminal Building The extent of the proposed terminal building is based on the ITB recently constructed at Townsville which was designed to cater for one fully loaded B747 aircraft to normal levels of service.

28. Facilities to be provided in the terminal will include health, immigration and customs, public areas and space for a concessionaire.

29. Departing passengers and members of the public will enter the terminal through the main entrance in the north-west corner. The entrance leads to the public concourse area which will have passenger check-in areas adjacent to which will be the baggage make up areas where items of non-cabin baggage are placed in baggage containers before loading on aircraft.

30. After checking in passengers will proceed through immigration to the departure lounge before boarding their aircraft.

31. Members of the public should be able to view departing and arriving aircraft and await the arrival of

passengers from the public viewing area, which is an extension of the public concourse, in the southern corner of the building.

32. Arriving passengers will enter the terminal and proceed through health and immigration checks and after claiming their baggage from a conveyor belt will proceed through customs and enter the public concourse.

33. It is proposed that arriving and departing passengers would leave or board their aircraft via an elevated aerobridge. The inclusion of this feature will necessitate the construction of a stair tower and lift at the southern end to provide access to the static link aerobridge. The additional cost of this feature is $500,000. The Committee notes that aerobridges are not provided at Brisbane, Perth, Hobart or Darwin International Airport Terminals, and is not aware of significant disabilities resulting from this lack. Furthermore, it is understood that the aerobridge at Townsville was provided to meet quarantine requirements, not relevant to Adelaide. The Committee believes there to be insufficient justification for the inclusion of the aerobridge and associated tower. The area of the terminal involved will therefore need to be redesigned.

34. Aprons and Taxiways The proposed apron is sited to accommodate one B747 in an aerobridge nose-in position and one B747 free-standing. Without an aerobridge the two aircraft would be nose-in free-standing. The size of the apron and the number of parking positions has been determined by considering the potential of the Adelaide air traffic market and likely airline scheduling. Two positions will enable one aircraft to stay overnight whilst permitting one early morning arrival.

35. The apron will be connected to the main runway and existing taxiway system by extending taxiway B by 100 metres.

36. The Runway The existing main (05/23) runway is 2582 metres long, 45 metres wide, with 7.5 metre wide

runway shoulders. The Department of Housing and Construction advised that the runway is of sufficient strength to handle the introduction of international services. There are no proposals to extend the main runway beyond the length now available. The length of the main runway may, however, result in restrictions to the operating weights of large international aircraft. The Australian International Pilots Association and Qantas both stated in evidence that the runway is of sufficient length to enable aircraft to operate on stated routes, i.e. Adelaide-Singapore direct, Adelaide-Perth direct and Adelaide-New Zealand direct.

37. Road Access and Car Parking Construction of the terminal at the proposed site will necessitate some road realignment. This realignment will result in the existing access road to the domestic terminal being moved further east, the addition of a one way road loop servicing the entrance to the terminal building and a carpark constructed between the terminal and the realigned road servicing the domestic terminal. This arrangement facilitates access to the ITB and avoids the need for traffic from the ITB having to proceed past the domestic terminal when leaving the airport.

38. Services The capacity of the existing electrical reticulation system is now fully utilised and will need to be upgraded to provide the additional requirements of an ITB complex. It is therefore proposed to provide a new high voltage feeder cable for incoming power from the airport boundary to serve both the ITB complex and the domestic terminal area. This rationalisation will result in savings in overall cost and further savings can be made by the provision of a combined standby power generation facility for, again, the ITB and the domestic terminal. Accordingly, it is proposed to provide a new high voltage feeder cable and a powerhouse to provide standby power to both terminals.

39. In addition, the ITB will be provided with water for domestic and fire fighting purposes, a sewerage system, apron lighting and carpark lighting.

40. Security Provision has been made in the design of the gate lounge to permit outward bound passengers and their baggage to be screened and for the subsequent segregation of screened passengers. The boundary between the public (landside) and the secure (airside) areas will consist of a combination of wire mesh security fencing, lockable doors and gates.

41. Utilisation DOT stated that indications from the airline industry are that a service level of six flights, most of which would transit through Adelaide, is currently planned. It was anticipated that at least one of these flights would be a terminating flight.

42. Qantas stated in evidence that their anticipated movements would range from between 12 to 20 per week. On the assumption that the facilities will become available towards the end of 1982, Qantas intends to provide for the operation of services to the United Kingdom/Europe, Asia and New Zealand from the date the facilities become available.

43. British Airways (BA) plan to commence operations with one arrival and one departure per week probably en route to Sydney. Depending on the volume of competition and capacity, this frequency will increase to twice a week within about one year of the commencement of services. BA will commence operations as soon as the terminal is ready, but these plans are contingent on BA obtaining Commonwealth Government approval.

44. Singapore Airlines advised the Committee that subject to Commonwealth Government approval its operation of one flight per week from Adelaide would commence in April 1983.

45. Alternatives to the Proposal DOT advised the Committee that two other alternatives were considered during the initial investigations into the provision of facilities for international services. These alternatives were:

a. Upgrading of the domestic terminal and apron area to accommodate the required international aircraft and passenger processing facilities as well as domestic airline facilities. Studies carried out by DOT and the Department of Housing and Construction indicated that given space constraints imposed by the proximity of the 12/20 runway strip and a possible parallel taxiway, and the existing building area, and given the structure and extent of the present domestic terminal and associated aprons, this option would result in an insufficient number of parking positions and associated ground manoeuvring area.

b. Provide limited international aircraft and passenger processing facilities with health, immigration and customs clearance activities being carried out at an existing gateway port. This would preclude the operation of direct outward bound and inward flights, pose security problems and is inconsistent with present practice.

46. The possibility of using RAAF Base Edinburgh for international flights was also pursued by the Committee. The Department of Housing and Construction advised that the strength of pavements at Edinburgh is not adequate for B747 aircraft loadings and traffic proposed and the taxiways are two narrow. The Department estimated that the cost to provide the international services proposed for Adelaide Airport at RAAF Edinburgh would not be less than $20 million.

REACTIONS TO THE PROPOSAL

47. Those opposed to the proposal reiterated many of the points made at the previous enquiry into the proposed upgrading of airport facilities for the introduction of domestic wide-body aircraft. These concerned aircraft noise, safety, air pollution and the effects of vibration and wake turbulence on houses near the airport boundary in the flight path of the main runway.

48. The majority of those opposing the proposal were not against international services to Adelaide. Their opposition was directed to further development of Adelaide Airport which they believed would further delay decisions concerning the construction of a new Adelaide Airport. The lack of decision, and the continued development of the airport at its present site, they believe, would worsen the level of aircraft noise, add to air pollution and increase the possibility of an aircraft crashing into the houses under the flight path.

49. Aircraft Noise As mentioned above, the Committee recommended in its final report relating to the upgrading of airport facilities for the introduction of domestic wide-body aircraft that the Minister for Transport should refer the matter of aircraft noise to the House of Representatives Standing Committee on Environment and Conservation. The Committee understands this is now being considered by relevant Ministers. Draft terms of reference for the enquiry are at paragraph 59 of the Committee's report.

50. The Committee's report also drew attention to the number of properties, estimated in 1980 by DOT to be within the 25 Noise Exposure Index, and of the reduction in this number by 1990.

51. Evidence provided by DOT for this reference indicates that takeoff noise levels of B747 aircraft will be lower than those currently being produced by B727 aircraft and noise levels on approach to landing will be slightly higher than DC9 aircraft.

52. In overall terms, DOT stated in evidence that B747 aircraft will be about as noisy as a DC9 on both takeoff and landing.

53. On balance the Committee believes that the operation of B747 aircraft at the level proposed will not worsen the noise problem.

54. Pollution A number of witnesses asserted that particulates and fuel components from aircraft operating from the airport have formed soot-like film on exposed surfaces of houses. The Committee believes there to be many potential sources of this material other than aircraft, such as internal combustion engines. At the Committee's request DOT is carrying out tests on water tanks of some houses under the flight path of the main runway near the airport boundary in order to establish the level of pollution and the source of the alleged water contamination.

55. The tests will initially involve gas chromatography analysis of domestic kerosene and aviation fuel to use as bench marks for the subsequent analysis of water samples. For hydrocarbons the tests will involve gas chromatographic analysis of samples taken from the water tanks and a control sample taken from a site away from the airport. For particulate analysis the samples will be passed through filter paper which can trap particles down to .45 microns in size. The results of the tests will be made available to the Committee.

56. Safety A number of witnesses stated their opposition to the proposed introduction of international flights was based on safety. They believed the main runway to be of insufficient length to handle large international aircraft and the location of houses under the flight path would expose them to greater safety risk than exists already. As mentioned previously, Qantas, the Australian International Pilots Association and DOT all stated in evidence that the existing 05/23 runway is adequate for the international operations currently envisaged. The main runway is 2528 metres in length. DOT stated in evidence that international operations from Australia are currently being carried out from runways of lesser lengths as shown in Table 2 below:

TABLE 2 - Runway Lengths - Brisbane and Townsville

	Aircraft Type	Runway	Length	Destination
Brisbane	B747 Combi	04/22	2366	Tokyo
Brisbane	B747-238B(RR)	04/22	2366	Hong Kong
Townsville	B747SP	01/19	2438	Honolulu
Townsville	B747-238B	01/19	2438	Auckland

57. Impartial evidence by leading overseas aviation writers, tabled by DOT, tended to suggest that safety criteria established and administered by DOT are conservative and that this has resulted in a comparatively good safety record. Provided safety measures and standards continue to be rigidly enforced and provided Adelaide Airport has the requisite air traffic control and navigation facilities available, the Committee sees no reason why, on the grounds of safety alone, international flights should not be able to operate from Adelaide.

58. Wake Turbulence Some residents and their representatives asserted that significantly larger aircraft would subject houses near the airport boundary under the flight path of the main runway to increased levels of wake turbulence. These houses, they asserted, are already subjected to this phenomenon which causes short-lived but strong wind gusts, roof tiles to be lifted and windows broken.

59. DOT advised the Committee that it is not possible to directly compare wake turbulence produced by B747 and B727 aircraft because of the many variables which have to be considered. The intensity of the downwash of air is a function of the speed of the aircraft, the wing loading and the shape of the wing. DOT stated that experience at airports around Australia has shown that the recorded damaging effect of wake turbulence has been minimal, being confined to a small number of tiles being dislodged as a result of inadequate fixing.

60. The Committee believes nevertheless that the magnitude of wake turbulence under the flight path will not decrease with the operation of B747 type aircraft. In the short term the effects of wake turbulence on the houses in question should be monitored and action taken to minimise any property damage. In the longer term, and in concert with the development of a provisional master plan for the present airport, and in concert with the South Australian Airfields Committee examination of alternative sites, some rezoning and redevelopment of areas adjacent to the current Adelaide Airport significantly affected may be necessary.

61. Airport Relocation As mentioned in the Committee's previous report, the South Australian Airfields Committee is currently endeavouring to identify possible sites for a new airport for Adelaide as a matter of priority. The Committee urges both the South Australian and Commonwealth Governments to react quickly to the State Airfield Committee's recommendations.

62. Master Plan and Environmental Impact Statement The Minister for Transport and the Minister for Home Affairs and Environment recently announced that a draft Environmental Impact Statement and provisional master plan would be released for public comment in July 1982. The Committee understands the environmental and social consequences likely to be associated with the continued development and use of Adelaide Airport, and any increase in international air traffic over the anticipated 4 to 6 flights per week, will be addressed in the provisional master plan and draft Environmental Impact Statement.

63. The Committee notes that no Envionmental Impact Statement was required for the proposed ITB works although a public information program was conducted by DOT to enable Adelaide residents to familiarise themselves with it and to comment on it.

64. The Committee is critical of the fact that a full Environmental Impact Statement was not prepared before the decision to provide international facilities at Adelaide Airport was made.

65. Economic Benefits A number of organisations, in supporting the proposal, stated direct access to international flights would benefit the South Australian economy. The South Australian Government stated the tourist industry, worth nearly $300 million to the State, has had its growth retarded in recent years and access to international flights would provide opportunities for full utilisation of the tourist industry infrastructure. Facilities for international conventions, already available or under construction, would also benefit from international traffic.

66. Other organisations pointed out access to international flights would improve the scope for air freight and the lack of this facility would no longer be a disincentive to overseas and Australian companies establishing or expanding their operations in South Australia.

67. Committee's Conclusions The construction of a separate international terminal building and associated apron and upgraded electrical services is supported.

68. The Committee is critical of the fact that a full Environmental Impact Statement was not prepared before the decision to provide international facilities at Adelaide Airport was made.

69. The design of the proposed terminal building is satisfactory with the exception of the stair tower and elevated aerobridge which should not be included.

THE SITE

70. The proposed site for the ITB complex is adjacent to the main airport entrance road, about 500 metres north-east of the domestic terminal.

71. It is understood that the final master plan for Adelaide Airport (not yet available) will provide for the eventual shift of the current domestic terminal to an area immediately adjacent to the proposed site for the ITB. When giving evidence at the public hearing DOT admitted that the current siting for the ITB was determined to permit the domestic terminal to be located further from adjacent houses because the volume of domestic traffic was expected to impose a greater noise nuisance to nearby residences.

72. Houses about 350 metres from the ITB site would be exposed to noise from aircraft engines and auxillary power units (APUs). The level of noise from these sources has not been assessed but it can reasonably be expected to be above that generated by general aviation aircraft which use the area now, and to persist for longer periods than noise made by departing and arriving aircraft using the main runway. The proposed works include the provision of a bund close to this housing to alleviate the noise nuisance caused by aircraft using the ITB. A blast deflection barrier is also proposed in conjunction with the ITB at this site at a cost of $40,000.

73. The Committee sought further advice from DOT and the Department of Housing and Construction on the practicalities and comparative cost of locating the ITB complex on a site opposite the present domestic terminal (the "alternative site").

74. DOT advised the Committee that the alternative site is inconsistant with the provisional master plan for Adelaide Airport which provides for the location of a future domestic terminal complex alongside the proposed site. Further disadvantages of the alternative site include increased taxiing distances for aircraft, the elimination of the possibility of constructing a parallel 05L/23R runway in the future, the relocation of some general aviation, and difficulties of access between the domestic terminal and the ITB.

75. However it must be made clear that the capacities of the current runways at Adelaide Airport are sufficient to meet forecast aircraft movements until 2010 so that the provision of an additional runway is not accepted as being critical.

76. The Department of Housing and Construction advised the Committee that the increased cost of constructing the ITB at the alternative site is assessed at between $0.5 and 0.75 million. Additional costs would arise from site preparation, 200 metres of full strength taxiway, electrical reticulation, water supply and sewerage. DOT advised the Committee that no time penalty attaches to the use of the alternative site although similar assurances have not been received from the Department of Housing and Construction in this respect.

77. The Committee believes the increased taxiing distances resulting from locating the ITB at the alternative site are not a significant factor mitigating against the site in the light of taxiing distances operating at other Australian airports.

78. The Committee realises that the separate location of the ITB and domestic terminal will create problems for passengers on domestic flights connecting with international flights but the Committee believes the number of travellers at Adelaide Airport so affected will be significantly less than the number of travellers at other airports where a similar separation of domestic and international terminals exists.

79. The alternative site has the advantage of being about 650 metres from residential areas and is contiguous to aprons serving the present domestic terminal.

80. It could also be argued that locating the ITB at the proposed site would add weight to locating the new domestic terminal next to it. The future development of Adelaide Airport will be the subject of a provisional master plan and draft Environmental Impact Statement, which will be made available for public comment. The siting of any future domestic terminal complex will be an important aspect of future development about which public comment must first be sought.

81. Committee's Conclusion The proposed site for the International Terminal Building at Adelaide Airport is not suitable. The International Terminal Building should be constructed opposite the present domestic terminal.

82. At the Committee's meeting on 29 April 1982 it was moved by Senator Foreman, seconded Senator Martyr, that the following paragraph be inserted in the draft report and the Committee agreed:

"SENATOR FOREMAN'S VIEWS

My views on the further development of Adelaide Airport are in the Committee's Second Report of 1982 (Final Report relating to the Upgrading of Facilities for the Introduction of Domestic Wide-Body Aircraft). I wish to reiterate that before any further development of Adelaide Airport is undertaken, tangible and positive steps must be taken now by the Commonwealth and State Governments for the construction of a new airport for Adelaide. The construction of an international terminal should be deferred at least pending the issue of the provisional master plan and draft Environmental Impact Statement for public comment, an assessment of public reaction, the completion of a final Environmental Impact Statement and master plan, and preferably until after the South Australian and Commonwealth Governments have taken the positive steps, mentioned above, for the construction of a new airport for Adelaide."

OTHER OBSERVATIONS

83. Curfew and Noise Abatement International flights will arrive and depart Adelaide outside curfew hours. The Committee believes aircraft movements should be restricted as far as possible to daylight hours. The Committee also reiterates recommendations, made in its previous report for domestic wide-body aircraft, concerning the scope for more rigorous application of noise abatement procedures. The Minister for Transport so far has not responded to this recommendation. All international flights wherever possible, and without prejudicing safety, should land from the direction of the sea and take off over the sea.

84. Radio Aids The Australian International Pilots Association pointed out to the Committee that the DOT submission made no mention of radio aids. Adelaide Airport would therefore be the only international airport in Australia serving international routes that would be without International Distance Measuring Equipment (DMEI). DOT advised the Committee that the provision of DMEI is planned for Adelaide and the installation of a Category 1 Instrument Landing System on Runway 05 is under consideration. The Committee believes both systems should be operational when regular international flights commence and planning and funding should proceed on that basis.

85. Staffing of ITB The Committee sought information on the staffing of the ITB by relevant Commonwealth departments. The ITB complex will require to be manned by officers from DOT, the Department of Business and Consumer Affairs (Bureau of Customs), the Department of Immigration and Ethnic Affairs, the Department of Health and the Australian Federal Police.

86. Information provided by these departments indicates that the terminal will be manned by staff assigned to positions which have yet to be created, by staff re-deployed from other areas and by staff on overtime.

87. Advice from departments indicates that additional capital costs of at least $0.42 million are required and are above the estimated construction costs considered in this report. The major requirements are from the Department of Business and Consumer Affairs with capital costs of some $257,000 representing required expenditure in visual display units, printer, closed circuit television cameras and monitors and the Department of Health of $150,000 for the provision of a macerator.

88. Advice indicated that additional annual operating costs for the Department of Business and Consumer Affairs, the Department of Health, the Department of Immigration and Ethnic Affairs and the Australian Federal Police total no less than $250,000 per annum, although it is clear that approaches to the Public Service Board for staffing changes in most cases have yet to be made.

89. Committee's Conclusion The Public Service Board should conduct a co-ordinated review of the staffing by Commonwealth departments of the International Terminal Complex. This review should include the requirements of all departments, and especially encompass the need for new positions to be created, the need for and the level of overtime, the practicalities of using part-time staff and the consequences of using, either on a full-time or part-time basis, redeployed staff.

90. Disposal of Aircraft Garbage The Committee is concerned that satisfactory facilities for the disposal of garbage from aircraft will not be available at the airport when international flights commence. It is understood that a macerator/steriliser unit will be provided, however, as it will not be available by October 1982, interim arrangements for garbage disposal will be required.

91. Committee's Conclusion As a matter of urgency, relevant departments should ensure that facilities at Adelaide Airport for the disposal of garbage from international aircraft are operational when international flights commence.

LIMIT OF COST

92. The limit of cost estimate for the works at January 1982 prices is $10.9 million made up as follows:

	$
Terminal building (including furniture and fittings)	4 100 000
Apron and other aircraft pavements	3 000 000
Access road, car park and engineering services	3 800 000
	10 900 000

PROGRAM

93. The works are planned to commence during May 1982. The following elements of the proposal are to be completed to a stage which will allow for the commencement of international flights in October 1982:

- sufficient of the taxiway and apron area to accommodate a single B747 aircraft;
- tug and ground service equipment pavement areas to service a single aircraft;
- the building structure, roofing, cladding and glazing;
- adequate partitioning to provide the required level of security;
- sufficient lighting and power;
- water supply and sewer drainge;
- public toilets;
- roadworks and car parking;
- fire protection works.

94. The whole of the works are planned to be completed by March 1983.

95. Committee's Conclusion With the exception of the stair tower, lift and elevated aerobridge, estimated to cost $500 000, the Committee recommends the construction of work to a maximum of $11.150 million at the alternative site.

RECOMMENDATIONS AND CONCLUSIONS

96. The summary of recommendations and conclusions of the Committee and the paragraph in the report to which each refers is set out below.

		Paragraph
1.	INTERNATIONAL AIR TRAVELLERS, TO AND FROM ADELAIDE, ARE PENALISED BY THE EXISTING AIRLINE ARRANGEMENTS, PARTICULARLY THE LACK OF AN INTERNATIONAL GATEWAY AT ADELAIDE.	20
2.	THE COMMITTEE ACCEPTS THAT THERE IS MARGINAL JUSTIFICATION FOR PROVIDING INTERNATIONAL AIRLINE TERMINAL FACILITIES IN ADELAIDE, PROVIDED THE GOVERNMENT IS CONVINCED THAT THE PENALTIES NOW BEING EXPERIENCED CANNOT BE REMOVED IN ANY OTHER WAY.	21

		Paragraph
3.	THE CONSTRUCTION OF A SEPARATE INTERNATIONAL TERMINAL BUILDING AND ASSOCIATED APRON AND UPGRADED ELECTRICAL SERVICES IS SUPPORTED.	67
4.	THE COMMITTEE IS CRITICAL OF THE FACT THAT A FULL ENVIRONMENTAL IMPACT STATEMENT WAS NOT PREPARED BEFORE THE DECISION TO PROVIDE INTERNATIONAL FACILITIES AT ADELAIDE AIRPORT WAS MADE.	68
5.	THE DESIGN OF THE PROPOSED TERMINAL BUILDING IS SATISFACTORY WITH THE EXCEPTION OF THE STAIR TOWER AND ELEVATED AEROBRIDGE WHICH SHOULD NOT BE INCLUDED.	69
6.	THE PROPOSED SITE FOR THE INTERNATIONAL TERMINAL BUILDING AT ADELAIDE AIRPORT IS NOT SUITABLE. THE INTERNATIONAL TERMINAL BUILDING SHOULD BE CONSTRUCTED OPPOSITE THE PRESENT DOMESTIC TERMINAL.	81
7.	THE PUBLIC SERVICE BOARD SHOULD CONDUCT A CO-ORDINATED REVIEW OF THE STAFFING BY COMMONWEALTH DEPARTMENTS OF THE INTERNATIONAL TERMINAL COMPLEX. THIS REVIEW SHOULD INCLUDE THE REQUIREMENTS OF ALL DEPARTMENTS, AND ESPECIALLY ENCOMPASS THE NEED FOR NEW POSITIONS TO BE CREATED, THE NEED FOR AND THE LEVEL OF OVERTIME, THE PRACTICALITIES OF USING PART-TIME STAFF AND THE CONSEQUENCES OF USING, EITHER ON A FULL-TIME OR PART-TIME BASIS, REDEPLOYED STAFF.	89
8.	AS A MATTER OF URGENCY, RELEVANT DEPARTMENTS SHOULD ENSURE THAT FACILITIES AT ADELAIDE AIRPORT FOR THE DISPOSAL OF GARBAGE FROM INTERNTIONAL AIRCRAFT ARE OPERATIONAL WHEN INTERNATIONAL FLIGHTS COMMENCE.	91

		Paragraph
9.	THE LIMIT OF COST ESTIMATE FOR THE WORKS AT JANUARY 1982 PRICES IS $10.9 MILLION.	92
10.	WITH THE EXCEPTION OF THE STAIR TOWER, LIFT AND ELEVATED AEROBRIDGE, ESTIMATED TO COST $500 000, THE COMMITTEE RECOMMENDS THE CONSTRUCTION OF WORK TO A MAXIMUM OF $11.150 MILLION AT THE ALTERNATIVE SITE.	95

(M.H. BUNGEY)
Chairman

Parliamentary Standing Committee on Public Works,
Parliament House,
CANBERRA, ACT

29 April 1982.

CONSTRUCTION

A. TERMINAL BUILDING

97. Building Structure The building structure will consist of steel portal frames on concrete pad footings with a reinforced concrete slab floor. The building will be of single storey construction.

98. Building Form Glazing will be restricted to public areas and lounges. The false ceiling throughout the building will conceal engineering services and assist in noise suppression.

99. External Cladding and Finishes Prefinished lightweight cladding will be used for external walls. Window frames will be coloured anodised aluminium with fixed glazing.

100. Internal Cladding and Finishes Walls will be plaster board with protective rails and finishes as appropriate to achieve the planned decor. Ceilings to public spaces will be acoustic board. Floors will be carpeted throughout with ceramic tiles in toilets and other wet areas. Plant rooms will have bare concrete floors treated for dust control.

101. Mechanical Services Occupied areas of the building will be air conditioned with mechanical ventilation to toilets, plant rooms and service areas. Refrigerated drinking fountains, set at a level to allow for use by people in wheel chairs, will be provided. A baggage conveyor, incorporating a "racetrack" collection system will be provided to the baggage collection area of the arrivals hall.

102. Electrical Services The terminal complex will be connected to the State Power Supply Authority grid.

103. Lighting in the larger open spaces and public areas will be mercury vapour with fluorescent lighting in offices, toilets and plant areas. Incandescent down lighting will be used to highlight areas of special function or interest.

104. Emergency, battery powered, lighting will be provided.

105. A public address system will be provided.

106. Provision will be made for a flight information system which will be installed by user airlines at their expense.

107. Cable ducting will be provided throughout the building for the installation of telephone services.

108. Fire Protection A sprinkler system will be provided throughout the building. The system will be connected to a warning alarm and the central alarm panel for the airport which is located at the airport fire station.

109. Fire hose reels and hand extinguishers will be placed in suitable locations throughout the complex.

110. Fire partitioning and exits will be constructed throughout the building in accordance with the relevant building code.

B. ENGINEERING WORKS AND SERVICES

111. Aircraft Pavements The aircraft pavement works consist of an apron, a connecting taxiway and the widening of some fillets.

112. The apron area will be constructed to accommodate two B747-type aircraft, each of maximum all up mass of 350 tonnes.

113. The aircraft parking positions, covering 6,660 square metres of the apron area adjacent to the terminal building will be rigid concrete pavement which will comprise

400mm cement concrete on 150mm crushed rock on not less than 1000mm of sand.

114. The remainder of the apron, which will be 14,000 square metres in area, will be flexible pavement comprising 50mm bituminous/tar concrete on 300mm fine crushed rock on 150mm sub-base on not less than 1500mm sand.

115. The existing pavements which will be used by international aircraft are of sufficient strength to handle international aircraft movements. The need for future resurfacing of aircraft pavements, which would eventually be required under use by domestic aircraft, may have to be brought forward. Resurfacing of existing pavements cannot be justified at present.

116. Other Pavements A 15 metre wide road directly adjacent to the apron and the terminal building will be constructed for the movement of aircraft tugs. The road will be a flexible pavement comprising 25mm bituminous concrete on 175mm of fine crushed rock on not less than 600mm sand.

117. Pavements for the movement and parking of ground service equipment will consist of a parking area adjacent to the north-east of the terminal building and a link road between the international and domestic aprons.

118. Car Parking Sealed car parking will be provided for 250 vehicles between the terminal building and the main access road. An adjacent unsealed area will be available for overflow parking.

119. External Electrical Services A new high voltage feeder main will be provided. It will extend from the State Power Supply Authority grid at Burbridge Road to the international and domestic terminals.

120. A central services building will be constructed adjacent to the ITB carpark to accommodate new emergency power generating equipment.

121. The aircraft apron will be floodlit and the lighting of roadways and car parking areas will be of similar standard to that existing already.

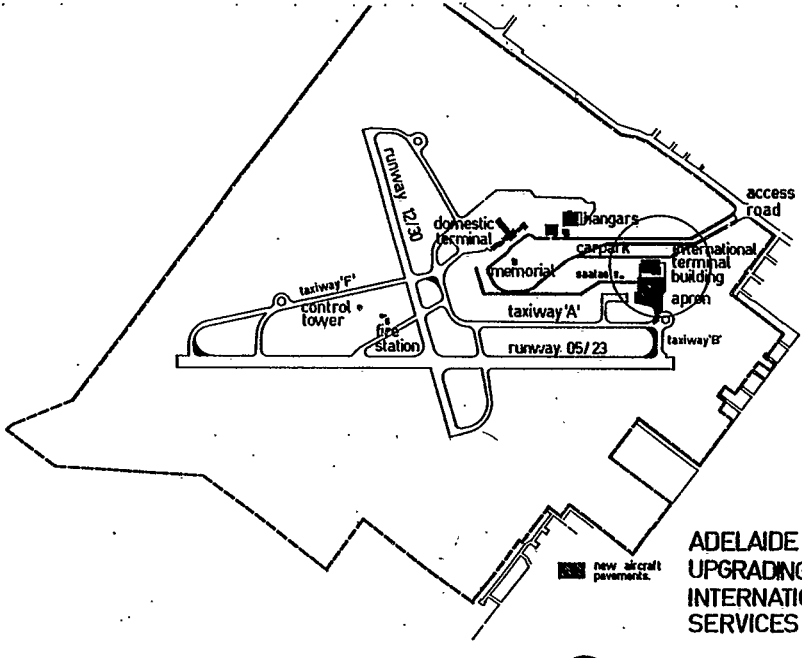
122. Domestic Water The airport domestic water supply system has sufficient capacity to supply the ITB.

123. Fire Services A separate water supply for fire protection, required under State building codes, will be provided. The main supply will be run from the existing fire service supply in the domestic terminal area.

124. Sewerage The ITB will be connected to the existing airport sewerage system. The increased load due to this development is within the capacity of the existing system.

125. Stormwater Drainage Roof areas from the ITB will be connected by underground pipework to the airport stormwater drainage system. All pavements will be designed for surface drainage.

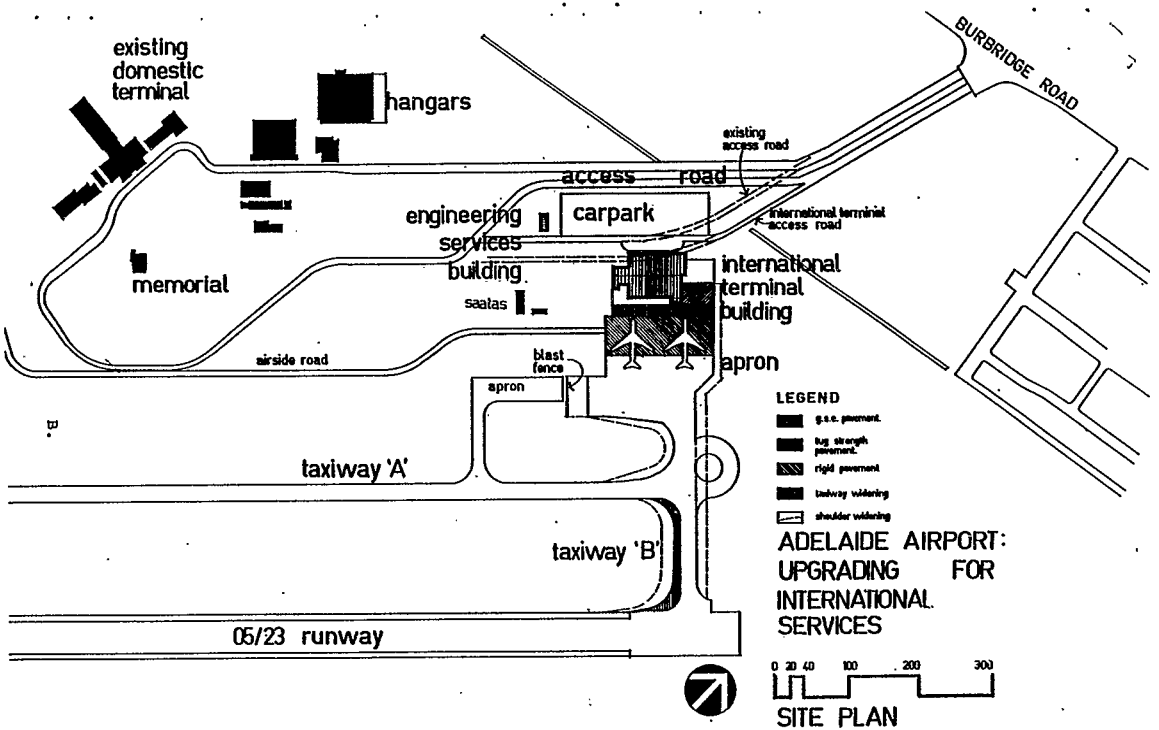
126. Landscaping Trees and shrubs will be planted in the area of the ITB to match the landscaping development already undertaken along and adjacent to the main access road to the airport.

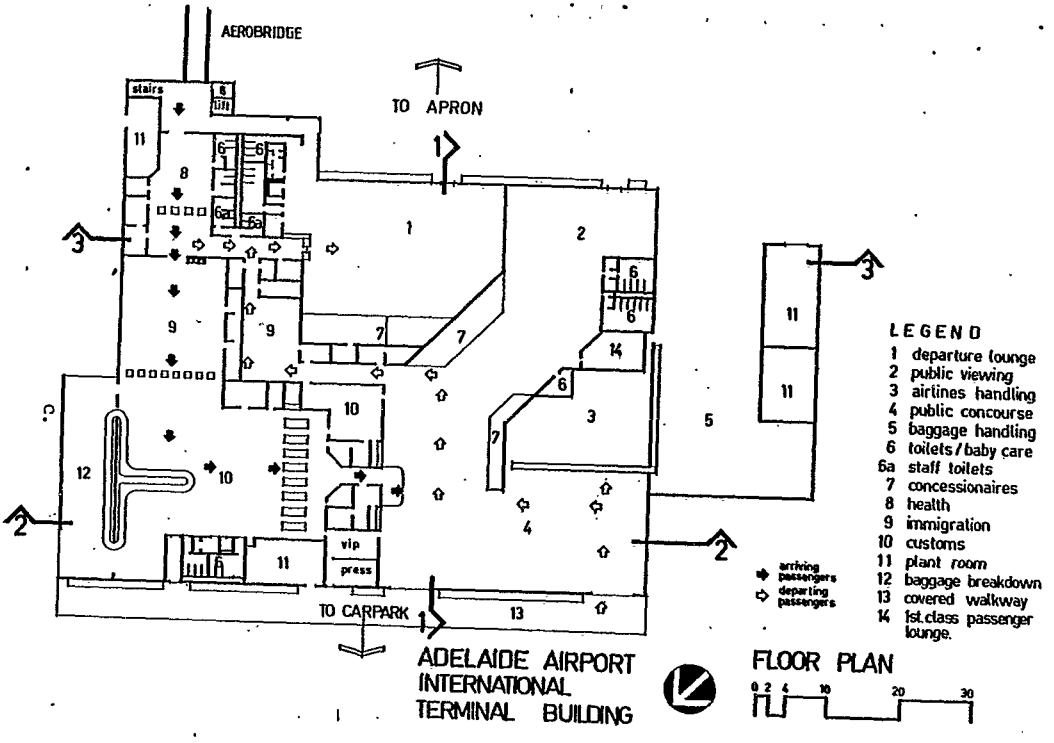


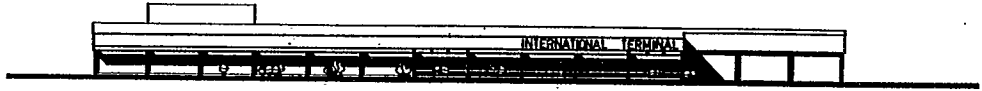
ADELAIDE AIRPORT: UPGRADING FOR INTERNATIONAL SERVICES

0 100 200 500 1000

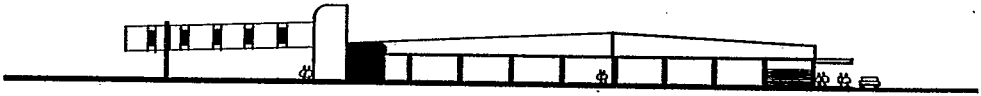
SITE LAYOUT PLAN


existing domestic terminal
hangars
BURBRIDGE ROAD
existing access road
access road
engineering services building
carpark
international terminal access road
memorial
international terminal building
saatas
airside road
blast fence
apron
apron
taxiway 'A'
taxiway 'B'
05/23 runway
LEGEND
g.s.e. pavement
flig. strength pavement
rigid pavement
taxiway widening
shoulder widening
ADELAIDE AIRPORT: UPGRADING FOR INTERNATIONAL SERVICES
0 20 40 100 200 300
SITE PLAN


AEROBRIDGE
stairs
lift
TO APRON
TO CARPARK
vip
press
LEGEND
1 departure lounge
2 public viewing
3 airlines handling
4 public concourse
5 baggage handling
6 toilets / baby care
6a staff toilets
7 concessionaires
8 health
9 immigration
10 customs
11 plant room
12 baggage breakdown
13 covered walkway
14 1st class passenger lounge.
arriving passengers
departing passengers
ADELAIDE AIRPORT INTERNATIONAL TERMINAL BUILDING
FLOOR PLAN
0 2 4 10 20 30



NORTH WEST



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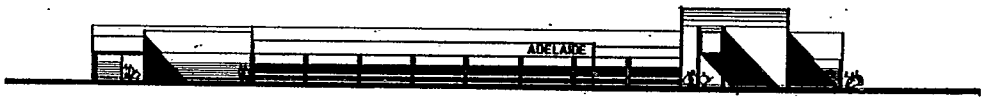
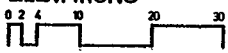


SOUTH EAST

SOUTH WEST

ADELAIDE AIRPORT
INTERNATIONAL
TERMINAL BUILDING

ELEVATIONS



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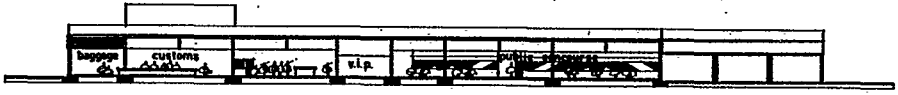

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section 3-3

ADELAIDE AIRPORT
INTERNATIONAL
TERMINAL BUILDING

SECTIONS